

Appl. No. 10/052,953
Response Dated March 12, 2004
Reply to Office action dated November 12, 2003

REMARKS/ARGUMENTS

Applicants have received and carefully reviewed the Office Action of the Examiner mailed November 12, 2003. Claims 1-24 remain pending. Reconsideration and reexamination are respectfully requested.

Applicants thank the Examiner and her supervisor for granting a telephone interview on March 11, 2004. Differences between the method of claim 1 and the method disclosed in the Heifler reference were discussed.

Rejection under 35 U.S.C. § 102(b)

Claims 1-3 and 6-10 are rejected as being anticipated by Heifler (US 5,980,123).

Applicants traverse the rejection. The method of Heifler involves different steps performed in a different order as compared to the method of independent claim 1. The claimed method involves the following steps:

- (1) illuminating an area with a pattern
- (2) capturing a live image of the area illuminated with the pattern
- (3) detecting an object entering the area based on a change in the pattern.

Heifler, however, discloses a method involving the following steps:

- (1) detecting a person entering an area based on the person's infra-red energy
- (2) illuminating area with spotlight if added light is necessary
- (3) capturing a live image of detected person

The claimed method steps are clearly different from the method steps disclosed in Heifler.

During the telephone discussion of March 11, 2004, the Examiner asserted the "detecting" step in the Heifler method is the step of a person reviewing the video and identifying the intruder, making the method steps (1) illuminating, (2) capturing a live image, and (3) "detecting" or identifying the intruder. Applicants respectfully disagree. The method of claim 1 specifically recites the step of detecting an object entering the monitored area. Heifler specifically recites detecting a person entering the monitored area, based on the person's infra-red (IR) energy, which is detected by a passive IR sensor. The later step in the Heifler method of possibly identifying the intruder based on the video image does not change the fact that Heifler

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clearly teaches a first step of detecting an object (intruder) entering a monitored area. The detecting and identifying steps of Heifler's method are clearly different. The identifying step must occur after the intruder is detected entering the monitored area. Applicants submit that the only step in the Heifler method that can be construed as a "detecting" step is the step of detecting the intruder based on the intruder's IR energy.

The method of claim 1 recites specific steps to be performed in a specific order. The steps of Heifler occur in a different order. In Heifler's method, the intruder is detected, and then the area is illuminated with light and a live image is captured. Heifler specifically teaches that the detection of the intruder triggers the spotlight, and the illumination is only necessary to provide light for the video camera if the ambient light is insufficient. See column 4, lines 35-38. In the method of Heifler, because the detection event causes the monitored area to be illuminated, the illumination step necessarily occurs after the detecting step.

Heifler's method also differs from the claimed method because the method steps themselves are different. The Examiner asserted the light from the spotlight in Heifler corresponds with the claimed step of "illuminating the monitored area with a pattern." If this interpretation is used, however, the detecting steps are necessarily different. The claimed method recites detecting an object based on a change in the pattern with which the monitored area is illuminated. Heifler specifically teaches using passive IR sensors to detect the IR energy given off by a person. See column 4, lines 1-2 and 29-32. Even if one were to ignore the specific teaching of Heifler that detection is by passive IR sensors, the spotlight illumination "pattern" cannot be construed to aid in the detection because the light from the spotlight will be the same every time the spotlight is turned on. The light from the spotlight is the same in the presence or absence of an intruder. It is merely light projected onto an area, not an illumination pattern, as is recited in the claims.

Heifler also fails to teach the limitations of the dependent claims. The Examiner asserts that Heifler does teach the following limitations, but has not indicated where in the reference such teachings can be found. Applicants have carefully reviewed the reference but find no teaching or suggestion of any of the limitations recited in the dependent claims. Because Heifler fails to teach detection based on a change in pattern, the reference also fails to teach detection based on the pattern exceeding a predetermined threshold, as is recited in claim 2. Heifler also fails to teach capturing a reference image including the pattern and then comparing the reference

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image with the live image to detect a change in the pattern, as is recited in claim 3. Heifler fails to disclose anything about mask windows or algorithms and thus fails to anticipate dependent claims 6-10.

Heifler fails to teach each and every limitation of the claims. Reconsideration and withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 4 and 5 are rejected as being unpatentable over Heifler. The Examiner asserts that it would have been obvious to select any pattern because the claimed pattern and the pattern used by Heifler are well known alternate types of patterns that will perform the same function of illuminating an area. Applicants respectfully disagree.

As stated above, Heifler fails to teach the basic limitations of the claimed method. Because Heifler teaches illuminating the monitored area with a spotlight only after an intruder has been detected by the IR sensor, there is no step of illuminating an area with a "pattern" that changes in order to detect an object. Heifler specifically states that the spotlight is normally inactive, and is only needed when there is insufficient light for the camera to view the intruder. See column 4, lines 32-37. The spotlight of Heifler is functioning as just a light source for the camera, and is not involved in any way with the IR detection system. Therefore, there is no motivation for one of ordinary skill in the art to change the spotlight of Heifler to a source of illumination with a static or dynamic pattern. Applicants submit that the only motivation for modifying the spotlight of Heifler is found in the instant specification.

Additionally, the type of illumination "pattern" recited in the instant claims and the spotlight illumination of Heifler do not perform the same function and are thus not known alternates. As stated above, the light in the method of Heifler merely serves to aid the camera in capturing an image of the intruder, and is an alternative to ambient light such as sunlight. The illumination pattern of the instant claims, however, is involved in the detection step. The illumination pattern is projected onto the monitored area, and it is a change in this specific pattern that is detected as an indication of an object entering the area.

Heifler fails to teach or suggest the limitations of the claimed invention. Additionally, Heifler fails to provide any guidance, suggestion, or motivation for one of ordinary skill in the art to modify the method of Heifler to achieve the instant invention.

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Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims 1-24 are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-677-9050.

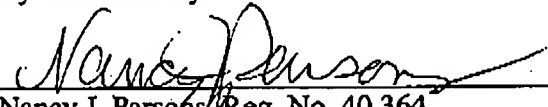
Respectfully Submitted,

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By their attorney:

Date:

3/12/2004


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